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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,157	01/31/2002	John F. Corson	10010382-1	3574

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AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

SIEFKE, SAMUEL P

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,157

Applicant(s)

CORSON, JOHN F.

Examiner

Samuel P Siefke

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 1-14, 22-26, 31 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15-21 and 27 is/are rejected.
- 7) ☒ Claim(s) 28-30 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/31/02, 2/11/04
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-14, 22-26, drawn to a chemical array reader apparatus, classified in class 422, subclass 82.05.
- II. Claims 15-21, 27-30, drawn to a method of using a chemical array reader, classified in class 436, subclass 8.
- III. Claims 31 and 32, drawn to a computer program product, classified in class 422, subclass 99.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group II and Group I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process can be practiced by hand, adjusting the focus by turning a knob that adjusts the height of the holder.

Inventions Group I and Group III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because that

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apparatus can be used as a simple microscope without a computer storage means. The subcombination has separate utility such as taking images and storing them on a computer and rendering time elapsed pictures.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Gordon Stewart on 6/7/04 a provisional election was made with traverse to prosecute the invention of Group II, claims 15-21 and 27-30. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-14, 22-26, 31 and 32 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

Claims 28-30 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claims should refer to claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims 28-30 are not been further treated on the merits.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **15-21** and **27** are rejected under 35 U.S.C. 102(b) as being anticipated by WO 99/47964.

WO '964 discloses a wide angle, limited rotation, micro-lens scanning of DNA arrays. The micro-lens on low moment of inertial oscillating arm, while light source 24, detector 10,95, and supplementary lenses are stationary, achieve rapid, wide angle pixel-based microscopy. Auto focus raising and lowering stage 50, by actuator 44, while object 2 translates, enables rapid, wide-angle confocal microscopy (abstract). The scanning microscope includes a light source mounted on a stationary support and associated with optical elements defining an optical path for light to pass from the light source to the micro objective lens, then to a spot on the surface to be examined. In any of the microscope systems which employ a table to receive the object, the table is associated with three adjustable elevators to raise, lower, and tilt the table for focusing, and a control system is constructed to conduct a perscan of the object in which data concerning orientation is stored, and a control system responsive to the stored data is effective to actuate the elevators as scanning proceeds to maintain the object in focus (page 14 bottom to page 15 top). All optical elements cooperate to perform in a manner similar to a conventional multi element objective lens. Starting on page 28 and continuing to page 31, the reference discloses adjustment of focus of the scanner. The focus correction is detected by photosensors 10 detecting modulation of the light by the tissue sample or by fiducial points. As the tissue sample approaches perfect focus, the

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amplitude of the high frequency components in the signal of the photosensors is increased relative to that of the lower frequency components and best focus is defined as that height of the microscope slide at which the ratio of high frequency components to low frequency components is maximized (page 30). Prescan of the microscope slide enables determination of the height of best focus of the microscope slide at a chosen grid of points on the microscope slide. This enables detection of whether the slide is tilted or bowed. This information is stored in computer memory and accessed during the progress of the subsequent fine resolution "examination" scan. During the examination scan the microscope slide is held on its support in exactly the same position it occupied in the prescan. When the examination scan occurs, the focus mechanism continually tracks the surface of the microscope slide in accordance with the stored data. In regard to gross height error due to pitch, roll or bow the computer program analyzes the prescan data and determines gross tilt correction. The actuators are accordingly set to correct gross tilt prior to the examination scan. During examination scan, as the linear stage 11 moves gradually while the microscope slide is scanned repeatedly, the position of the microscope slide is continually adjusted by focus mechanisms 8 based upon the stored prescan data for pitch and bow (page 31).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel P Siefke whose telephone number is 571-272-1262. The examiner can normally be reached on M-F 7:00am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1700. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam P. Siefke



November 26, 2004



Jill Warden
Supervisory Patent Examiner
Technology Center 1700